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## Analytical overview of the chinese organic sector with a focus on rural development

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**Key words:** Chinese organic sector, organic value chain, challenges for smallholders

### Abstract

*Like many others in China, the certified organic agriculture sector has grown rapidly, but with different characteristics than expected. Preliminary findings from this research show that there are inter-linking problems from farm to market in the whole value chain of organic production in China. For instance, lack of skills and knowledge at the farm level is leading to difficulties in adopting organic production practices. Traders are mainly interested in high-value single-crop marketing, and farmers are struggling to sell their other rotation crops. Access to information is difficult for farmers, as the resources for providing technical services and information on organic practices are limited. On the other hand, the application of Chinese organic standard has become increasingly stringent since the Chinese government updated the Chinese organic regulations and standards.*

### Introduction

China is one of the fastest-growing economies in the world, with a continuously rising demand for agricultural goods. This fast growth came at a cost, however – it stresses natural resources, pollutes the environment, and increases income inequality between the poor and the rich. Organic agriculture is widely regarded as a promising modern alternative to these issues. This research aims to analyze the competency of the organic sector and its challenges to rural populations in China. The overall objective is to gain a better understanding of the Chinese organic sector. This paper represents one part of a bigger ongoing research project implemented by International Federation of Organic Agriculture Movements (IFOAM) and International Network for Bamboo and Rattan (INBAR). Follow-up findings and results will be added once they are completed. The research applies a value-chain approach to study the different activities within the production chain in China.

### Approach and methods

The data used in this research are sourced from expert interviews and a literature review. Qualitative data were collected through in-depth interviews with semi-structured questionnaires. In total, 5 groups of stakeholders related to the organic value chain were identified for interviews. These groups are producers and processors, traders and retailers, service and input providers, researchers, and other related stakeholders. Instead of sampling the interviewees at a particular time or place, stakeholders were selected according to their roles and functions in the organic value chain. The interviews were conducted in Beijing and Shanghai, China, and in Germany. Data were also collected at the Biofach Organic Fair, Nürnberg 2013; from Beijing farmers markets; and during the Shanghai Organic Certification Conference, 2013. The research adopts the Sustainable Rural Livelihoods (SRL) Framework (Scoones, 1998) to analyze the range of formal and informal organizational and institutional factors that influence sustainable livelihoods in the organic value chain.

### Characteristics of the Chinese Organic Sector

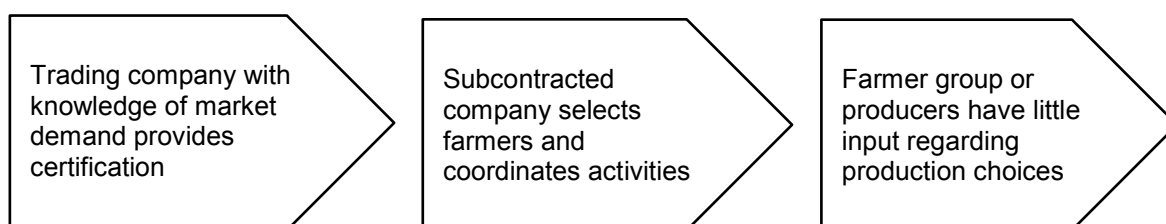
For a few decades, Chinese authorities have sought alternatives to conventional agriculture to maintain high productivity without causing degradation of natural resources and the environment to fulfil the need for safe and sufficient nutrition for a still growing society. Certified ecological or organic agriculture has been suggested to be a modern and promising alternative that has a sound record of adapting food safety and natural harmony (Shi, 2002). Starting from the early 1990s, the Chinese government introduced different ecological certification schemes to the Chinese agro-food system including "Green Food," "Hazard-free

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Food,” and “Organic Food,” which are operated by different authorities of Ministry of Agriculture (MOA) and Ministry of Environmental Protection (MEP) such as the China Green Food Development Center (CGFDC), Organic Food Development Center (OFDC), and China Organic Food Certification Center (COFCC). However, none of these schemes have shown outstanding success (Scott et al., 2013). On the other hand, the organic agriculture movement in Europe and North America has grown rapidly, and the international demand for organic products has reached China. A rapid increase in various international certification schemes from different international organizations in China has led to the development of a new independent organic sector. As a result, China has become one of the leading countries in organic agriculture, with 1.4 million hectares of organic arable land by 2012 (FiBL, 2012). This enormous emergence and growth in such a short time is difficult to control, however, and the pricewise benefits have mostly remained with the international traders. The environmental benefits have not been seen directly or immediately by smallholders because they are mostly long-term results. The diagram below displays how a typical organic food chain in China functions. It should be noted that individual stakeholders are not detailed in this diagram.



**Figure 1: Function of a typical Chinese organic food chain**

The major drivers behind organic production in China are international trading companies working directly with subcontracted local companies. These trading companies provide inputs technical advice, and marketing channels to poor farmers with small plots, e.g., less than 0.5 hectares per household – especially in southern China (Ye et al., 2001). The preliminary findings indicate that the Chinese organic agriculture sector has followed a different development pattern than those of other countries due to its trade-oriented roots and top-to-bottom approach, which is driven by commercial traders.

## Results and Challenges

According to the SRL framework, starting from the farm level, our findings show that farmers’ knowledge of organic farming fundamentals is lacking in China. With a thousand years of agricultural history and experience, Chinese farmers are traditionally good practitioners of ecological agriculture, from compost application to biological pest control, and their traditional knowledge centers around practices that keep the material flows cycle sustainable on farms. Our data show that many farmers complained about the difficulty of crop rotation. Others were not sure about application of pest-control strategies. The interviews revealed that information sourcing was more on a discussion basis rather than through structured and transparent systems between farmers. Therefore, know-how and information transfer, as well as access to updated information, represent a critical bottleneck at the farm level.

Technical services are provided by the Chinese government and sub-contracted companies, as mentioned in the above diagram. The government provides knowledge on organic farming through rural extension services; however, resources for advisory services on organic practices are limited. Another issue at the technical level is the lack of organic testing laboratories. All samples are first sent to Europe for testing, which is a very time-consuming and expensive process. Even though good laboratories with new and modern equipment exist in China, none of them are yet accredited.

The certification business is at the center of the organic food chain, and certification companies are abundant in China. In 2004 the number of organic certification bodies was 4; by 2006 the number had already reached 30 (Kledal et al., 2007). Most of these companies are international with branch offices in China. Thus, frequent communication with the head offices is required, which can impact information exchange. Difficulties related to reporting non-compliances were observed to be due to cultural hierarchical relations and other reasons.

Interestingly, organic agriculture is mostly understood as a food-safety instrument in China. Among 17 interviewed inspectors, 10 of them studied food sciences, and their technical knowledge of farming was limited, which caused them difficulties understanding the application of organic farming practices. Still, local inspectors seem to have the most information in the sector as well as the most accurate information. On the

other hand, it was mentioned during interviews that some inspectors are also involved in commercial relations with traders, which raises concerns linked to independence.

Due to the increasing number of general food scandals and occurrences of residue in organic raw materials in China (Xue and Zhang, 2012), in 2012 the Chinese National Certification and Accreditation authority updated the existing Chinese organic standard with many additional requirements. The new Chinese organic standard became one of the world's most difficult to achieve certification for, and the prospects of the new Chinese organic standard for the overall organic food chain as well as its challenges have not yet been discussed or assessed. Moreover, the new regulations mostly favor large producers, so the potential benefits of organic agriculture to rural development will be gradually reduced. On the other hand, the existing constitutional laws do not always favor organic producers. Unclear land ownership issues are often a problem for inspectors and for the scope of the certification. Marketing organic products is another challenge for producers. The domestic market demand is limited, and international markets are difficult to access. Traders have little interest in rotation crops, so the financial benefits to farmers are marginalized. Some farmers complained about the need to sell organic products to conventional markets (with resulting decreased financial returns). The consumer awareness on organic products is weak because many other products on the local market are sold under the labels of "healthy," "natural," or "ecological," confusing the end consumer.

## Discussion and Suggestions for the Challenges in the Chinese Organic Sector

The organic sector in China shows different characteristics than its counterparts in Europe in terms of supporting concepts such as small producers, locality, and fairness. A strong top-to-bottom system is observed and predominant in the Chinese organic agricultural sector, which makes it hard for small producers to be involved in decision-making processes. On the other hand, entering the organic sector seems to be a challenge for Chinese small farmers because of technical and economic difficulties.

With our preliminary findings we suggest that if the organic farming extension services are strengthened, the farmers' knowledge can be increased; if the domestic market will be better promoted, the farmers can have better and direct access to these markets; and if the benefits can be shared better, the challenges of the Chinese organic food chain can be tackled in order to ensure sustainable livelihoods in the value chain. An effective institutional instrument for ensuring fair benefit share between large trade companies and small producers should be established by the government through consultation with different stakeholders. Consequently, it is recommended to increase support to farmers and to increase consumer awareness of organic food.

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